

## Model for a Transnational Biomedical Library Partnership in the Digital Age

William F. Garrity, MA; Fred C. Pond, MLS; Tom Mead, MLS;  
Virginia V. Rolett, MLS; Ellis L. Rolett, MD

Dartmouth Biomedical Libraries and Dartmouth Medical School  
6168 Dana Biomedical Library  
Hanover, New Hampshire, 03755, USA  
<http://www.dartmouth.edu/~biomed/>

### Abstract

In this paper, we describe our experience working with Russian libraries in Petrozavodsk (Republic of Karelia) and St. Petersburg. The Dartmouth Medical School has collaborated with the Faculty of Medicine and teaching hospitals of Petrozavodsk State University since 1992. Between 1992 and 2000, in support of a physician exchange program, Dartmouth donated biomedical textbooks and journals to the National Library of the Republic of Karelia, created subject bibliographies on a variety of medical conditions, trained librarians in the use of the MEDLINE database, and provided full-text reprints of journal articles to faculty members at Petrozavodsk State University. In 2000, Dartmouth organized a symposium in St. Petersburg on the topic of digital information technology and resources in medicine (<http://www.dartmouth.edu/~libnet/medlibnet/mln.html>). The symposium brought together representatives from scientific and biomedical libraries and medical faculties based in Petrozavodsk, St. Petersburg, Novosibirsk, the University of Pennsylvania School of Medicine, and the Dartmouth Medical School. The immediate outcome of the meeting was to shift information sharing from print materials to digital resources and electronic document delivery. Since 2000, the hallmarks of the partnership, from the Dartmouth perspective, have been 1) the promotion of an "activist" library model that emphasizes education, outreach, and marketing; and 2) a focus on provision of and effective use of digital information resources. The combination of long-standing personal relationships, collaboration with publishers, and an emphasis on meeting the needs of the Russian libraries and their clients has proven to be an effective approach for this ongoing twelve year-old partnership.

### Background

The present Dartmouth-Petrozavodsk biomedical library partnership is an outgrowth of the Vermont-Karelia Sister State Relationship (<http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=03APPENDIX&Chapter=009&Section=00001>). The library partnership evolved from a physician exchange program that was initiated in 1992 and centered on the treatment and prevention of cardiovascular diseases. From the beginning, finding and sharing relevant biomedical information has been an important component of the program. Dartmouth helped develop a focused collection of books and journal articles dealing with cardiovascular diseases at the National Library of the Republic of Karelia (NLRK) in Petrozavodsk. It was clear early on that there was a high level of interest in Western biomedical literature among physicians at the teaching hospitals affiliated with the Faculty of Medicine at Petrozavodsk State University (PSU). Access to Western literature, however, was limited by financial and intellectual property restrictions. As part of the treatment and prevention program, one of us (VVR) created targeted notebooks with subject bibliographies and copies of each article for distribution to physicians with whom we were working. This approach was based on a model of personalized information services earlier developed by VVR for researchers and teachers at several American universities. Duplicate copies of notebooks were placed on reserve at the NLRK.

The subject bibliography approach produced secondary benefits. It exposed the targeted Russian physicians to bibliographic formats used in Western journals and in MEDLINE and provided the physicians with examples of the appropriate use of citations for their own publications. For the Russian librarians, it introduced them to the concept of personalized information services provided by a librarian and created a deeper appreciation of the importance of peer-reviewed journals.

With increased awareness of the possibility of obtaining current biomedical literature, demand increased significantly. Provision of full-text articles from Western biomedical journals to our Russian medical colleagues became an important element of the medical exchange program. At the start, with no direct Internet access as a conduit for document delivery, the program depended on traditional postal mail services and hand-delivery of requested articles. Communication by email, although slow at the beginning, was essential to the process.

In 1996, the U.S. National Library of Medicine (NLM) provided the NLRK and the PSU Computer Center with complimentary passwords for the "Grateful Med" MEDLINE dial-in service. For the first time, this gave the Petrozavodsk professional and academic communities online access to a Western bibliographic database. In 1999, Dartmouth received a contract from NLM to train Russian librarians in advanced MEDLINE and Internet search techniques. In October-November 1999, two librarians, one each from the NLRK and the Scientific Library of PSU, received training at Dartmouth. As problems with telephone links were surmounted and other librarians were trained by the two who had visited Dartmouth, libraries in Petrozavodsk began providing MEDLINE searches on request to physicians, medical faculty, and students. As our Russian partners developed advanced skills in searching online databases of Western biomedical literature, there was a dramatic role-shift from literature searches being performed by Dartmouth librarians to being performed by trained librarians in our Russian partner libraries.

Nevertheless, full-text document delivery remained slow and sporadic until 2000. In May of that year Dartmouth organized a symposium in St. Petersburg on library networking and biomedical information with financial support from NLM (see <http://www.dartmouth.edu/~libnet/medlibnet/mln.html>, under Reports). The symposium brought together representatives from scientific and biomedical libraries and medical faculties based in Petrozavodsk, St. Petersburg, Novosibirsk, the University of Pennsylvania School of Medicine, and the Dartmouth Medical School. A library consortium was created for the purpose of strengthening access to current biomedical information by the participating libraries. An agreement was worked out for free electronic document delivery within specified limits among the two American libraries and libraries in Petrozavodsk and St. Petersburg. Moreover, at the conference it was announced that a major health sciences publisher would provide complimentary access to its full-text, online medical database for the Russian partner libraries. The immediate outcome of these arrangements was to shift information sharing from print materials to digital resources and electronic document delivery. The following year, a Dartmouth biomedical librarian (FCP) spent one month in Petrozavodsk and St. Petersburg training librarians and health professionals in online database searching.

The biomedical library consortium, which comprised two libraries in Petrozavodsk, two in St. Petersburg, and two in the United States, proved unwieldy to manage within the available resources. Thus, in 2002, the consortium was dissolved and a separate agreement was worked out between Dartmouth and the two institutions in Petrozavodsk. Later that year, a delegation of library heads (Director of the Scientific Library, PSU; and Director of the National Library of the Republic of Karelia) and university leaders (Vice-Rector for Research and Chair of the Department of Family Medicine, PSU; and Chair of the Department of Foreign Languages, PSU) from Petrozavodsk visited Dartmouth for a two-week workshop titled "Information Resources and Services: Integrating Libraries

and Digital Information for the Support of Biomedical Education, Research, and Clinical Practice" (<http://www.dartmouth.edu/~libnet/medlibnet/mln.html>, under News). Digital information tools that were demonstrated included Ovid (<http://www.ovid.com>), a general biomedical information resource, and UpToDate (<http://www.uptodate.com>), a clinical decision support tool.

### Current Status

The principal thrusts of the current partnership between the Dartmouth Biomedical Libraries and the Scientific Library of Petrozavodsk State University and the National Library of the Republic of Karelia are 1) the promotion of an "activist" library model that emphasizes education, outreach, and marketing; and 2) a focus on provision of and effective use of digital information resources.

By "activist" library model, Dartmouth means a philosophy of biomedical librarianship that sees librarians as active and equal partners with teachers, clinicians, and researchers. Dartmouth biomedical librarians are engaged in many aspects of medical education (undergraduate, postgraduate, and continuing medical education), patient care and education, and research and discovery. Dartmouth's biomedical libraries emphasize a) education--helping teachers, students, clinicians, and researchers become proficient in finding, managing, and applying information, b) outreach--going outside of the library to work with clients in their classrooms, clinical facilities, and laboratories, and c) marketing--learning what clients need, providing those things, and generally publicizing library and information resources and services. The Biomedical Libraries' annual report, at [http://www.dartmouth.edu/~biomed/about.html#annual\\_report.shtml](http://www.dartmouth.edu/~biomed/about.html#annual_report.shtml), describes much of the activity.

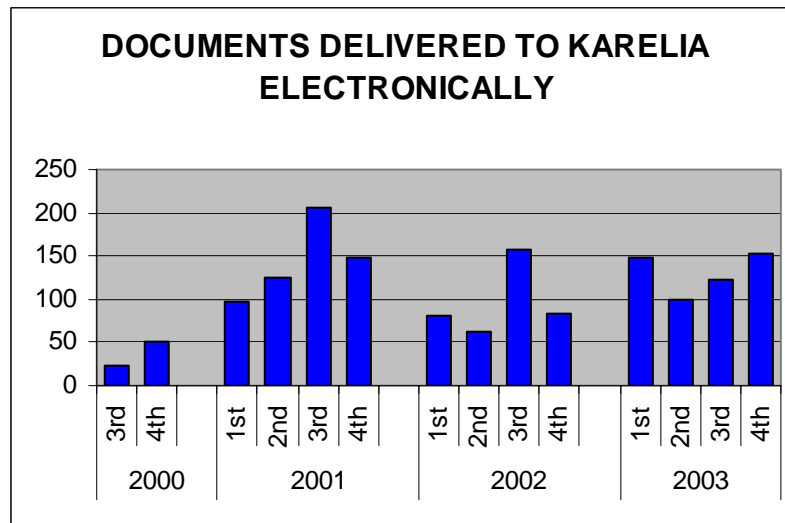
Through bilateral exchanges of biomedical librarians, the partnership seeks to expose our Russian collaborators to models that substantively involve the library in the work of its clients. In April-May 2004, one of us (TM), a senior biomedical librarian with experience supporting clients in innovative ways, will spend several weeks in Petrozavodsk. The goals of his visit are to promote a variety of library service models and to provide further training in using digital information resources.

Our partnership places emphasis on digital information resources because paper-based collections are difficult and expensive to assemble and maintain. Moreover, they are not networkable. Relatively deep and broad digital collections can be assembled somewhat more easily, particularly to support clinical disciplines. Since digital collections are networkable, they can be made available to disbursed and remote clients. However, digital collections are expensive, perhaps more so than paper-based collections. Dartmouth has used its contacts and influence with several major health sciences publishers to give gratis access to their collections and services to our Russian partners. These gifts are not likely to be perpetual, and the challenge is to see how the digital libraries can be continued.

Usage of these digital information resources by Dartmouth's partner libraries and their clients has demonstrated a clear preference for full-text articles from online journals over information in online books. For example, during the first six months of the availability of a particular system, journal articles from that source were accessed three times more often than books.

However, not all information is available in digital form. Accordingly, Dartmouth delivers copies of journal articles from its collections to the Russian partners. The collaboration uses advanced technology, at both ends, in this "document delivery" operation. DOCLINE (<http://www.nlm.nih.gov/docline/>) is used to manage the operation. Documents are

scanned at Dartmouth and transmitted to Petrozavodsk over the Internet as images via Ariel software (<http://www.infotrieve.com/ariel/index.html>). We are able to provide approximately 75% of requested articles from Dartmouth's own collections.



The current thrusts of the partnership are supported by the recent establishment of "Internet sections" with full-time staff at both the Scientific Library of PSU and the NLRK. Computer hardware was purchased with funds provided by the Soros Foundation (<http://www.soros.org/>) and USAID's Internet Access and Training Program (<http://www.usaid.gov/>). These Internet sections perform online searches for library clients and train clients in the use of the Internet.

#### Funding

The partnership program has mainly been supported by voluntary contributions of professional and administrative time and effort, Dartmouth resources, and free access to medical databases and clinical decision support systems donated by publishers. Direct costs of approximately \$30,000 have been covered by seed funding from NLM and donations.

#### Challenges

The Dartmouth-Petrozavodsk partnership has encountered three significant challenges: 1) organizational and structural, 2) limited financial resources, and 3) language barriers.

In the United States, academic medical libraries typically are specialized libraries, which serve the information needs of the various components of a unified academic medical center--namely, a medical school, teaching hospitals, and physician practice groups. American academic medical centers, in terms of ownership, may be composed entirely of private institutions (for example, Dartmouth), public institutions, or a combination of the two. In Russia, medical libraries are often placed within universities or medical academies and serve primarily as lending libraries for medical textbooks and test materials, whereas the university library (the "scientific library") is responsible for meeting the academic needs of the medical faculty (and all other faculties as well).

A consequence of these differences is that librarians and collections in Russian scientific libraries tend to be less specialized than in American academic medical libraries. A similar situation applies to free-standing national and central libraries in Russia (with the exception of the Central Medical Library in Moscow), to which hospital and polyclinic-

based physicians must turn for medical information. Medical collections in Russian libraries may be subsumed within more general collections. Because scientific libraries in Russia serve a broader range of disciplines than medical libraries in the United States, individual librarians in Russia often are responsible for a broader range of disciplines and so perhaps are less well positioned to offer individualized service.

There are challenges that are particular to our Russian partners. The major one, clearly, is a lack of resources--that is, a lack of funding. Because universities and libraries in Russia on the whole are government institutions, they must compete with other governmental institutions for financial support. The combination of governmental controls and financial pressures, while perhaps constraining our Petrozavodsk partners from being as entrepreneurial as they might wish to be, nonetheless may encourage them to be all the more resourceful. Progress is being made with the availability of high-speed, broadband Internet connectivity, as well as with greater availability of computers for both general and specialized uses within our partner libraries. Nevertheless, the lack of funding constrains the ability of our Russian partners to acquire and license, on a sustainable basis, information resources. Equally importantly, the financial pressures under which they operate may limit their flexibility to encourage librarians to develop collaborative relationships with teachers, researchers, and clinicians.

Language is obviously a major challenge. We at Dartmouth have limited Russian language competency. Less obvious is the relative unfamiliarity that our Russian partners have with the intricate architecture of Western biomedical and scientific literature, and the complete unfamiliarity U.S. librarians have with Russian literature (including the very few Russian biomedical journals that are indexed in MEDLINE). These gaps tend to be bridged, however, by the rich heritage of professional service common to U.S. and Russia librarians.

We are mindful of cultural differences between Dartmouth and our Petrozavodsk librarian partners. As we have described, many U.S. biomedical librarians bring what we at Dartmouth call an "activist," entrepreneurial approach to their responsibilities to serve clients. This may be a relatively new concept for our Russian colleagues, as it is for many librarians in the U.S.

### Keys to Success

The experiences of the Dartmouth-Petrozavodsk partnership suggest a number of key principles for success. Sustained personal relationships and individual commitment are the most important, we believe. Institutional administrations can mandate collaboration, but collaboration in these complicated and opportunistic endeavors is unlikely to happen without sustained relationships among individuals at various levels in the organization. Two-way exchanges of medical faculty, librarians, and university leaders have supported the development of personal relationships within the partnership.

Other successful characteristics of the Dartmouth-Petrozavodsk partnership are that it is low-intensity, evolutionary, and sustained--in potential contrast to high-intensity and relatively inflexible programs that may be typical of many governmental and NGO programs.

English reading competency by many Russian clients, especially the younger ones, has advanced this partnership. This makes it possible to provide English-language information resources directly, instead of offering Russian translations.

### Outcomes and Conclusion

What outcomes has the Dartmouth-Petrozavodsk partnership had? We think that for the Russian partners, it has increased timely access to current biomedical information resources and services, enhanced librarians' skills, and, perhaps most importantly, presented an "activist" library model.

For Dartmouth, the partnership brings international exposure and collegial relationships to the library staff, and it resonates with Dartmouth's broader commitment to global initiatives (including the Dartmouth Initiative in Global Health and Health Development -- <http://www.dartmouth.edu/humbio/global-health/>). The Dartmouth Libraries consider this to be a very important staff development activity. Learning how librarians in other cultures serve similar populations makes Dartmouth librarians more conscious of their roles as information managers and teachers in the medical community.

From our perspective, we believe that the combination of long-standing personal relationships, responsiveness to new needs as they become apparent, and collaboration with publishers has contributed to a productive partnership.